

Figure 1

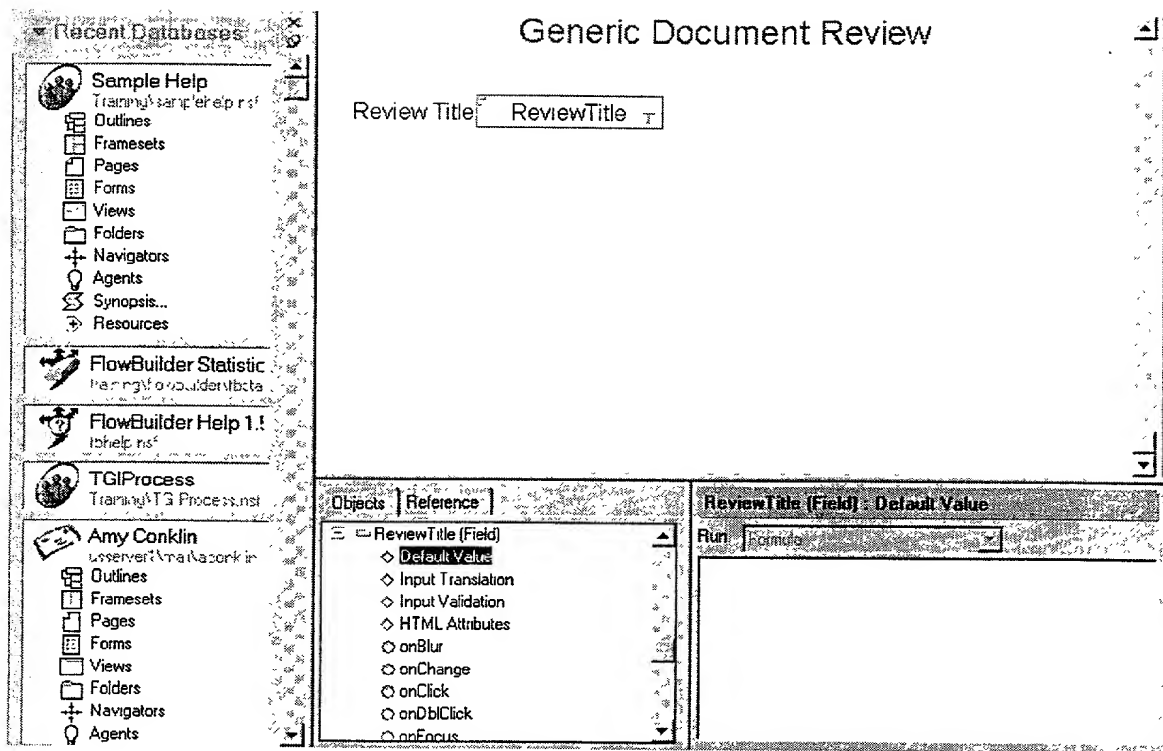


Figure 2

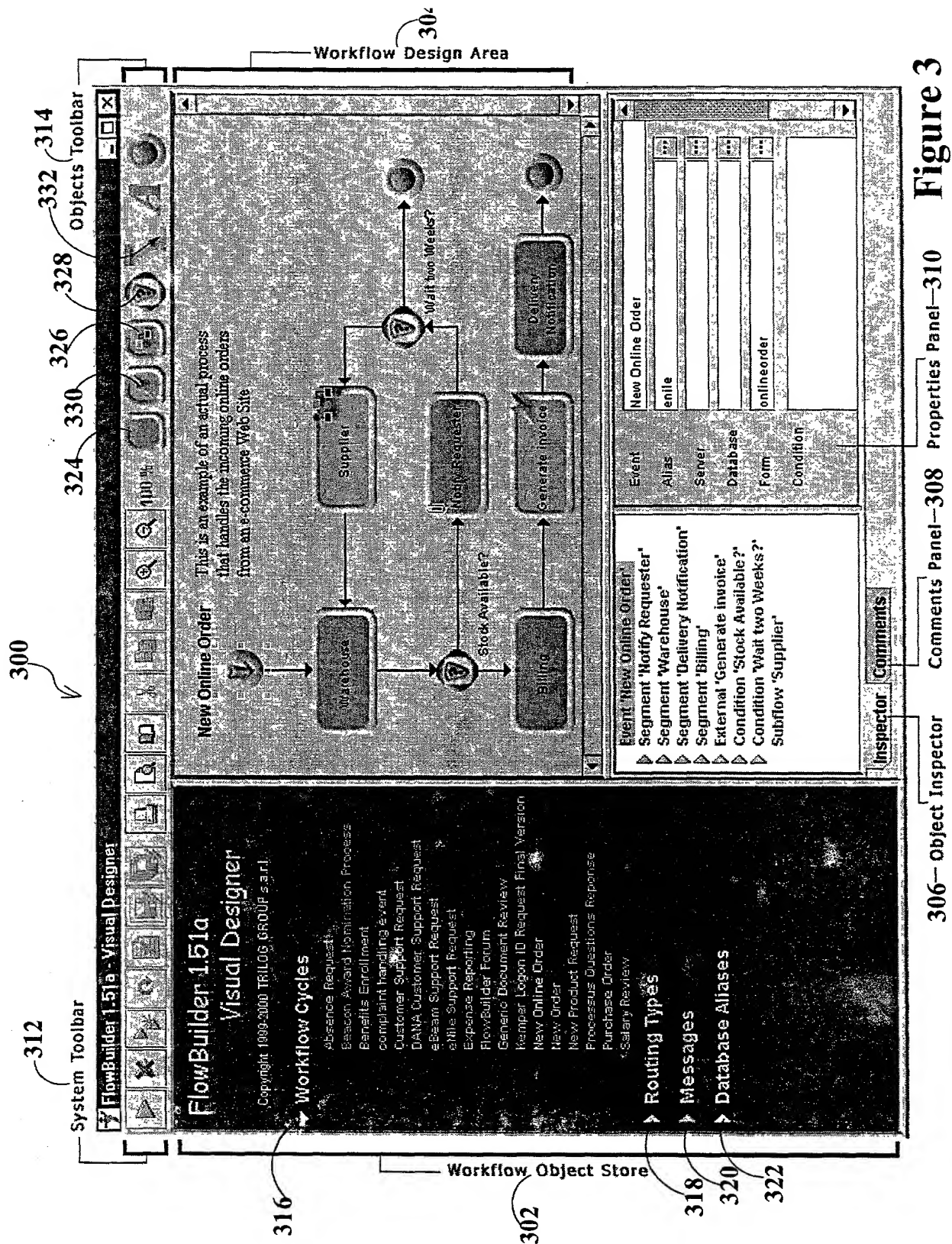


Figure 3

306—Object Inspector 308 Comments Panel—308 310 Properties Panel—310

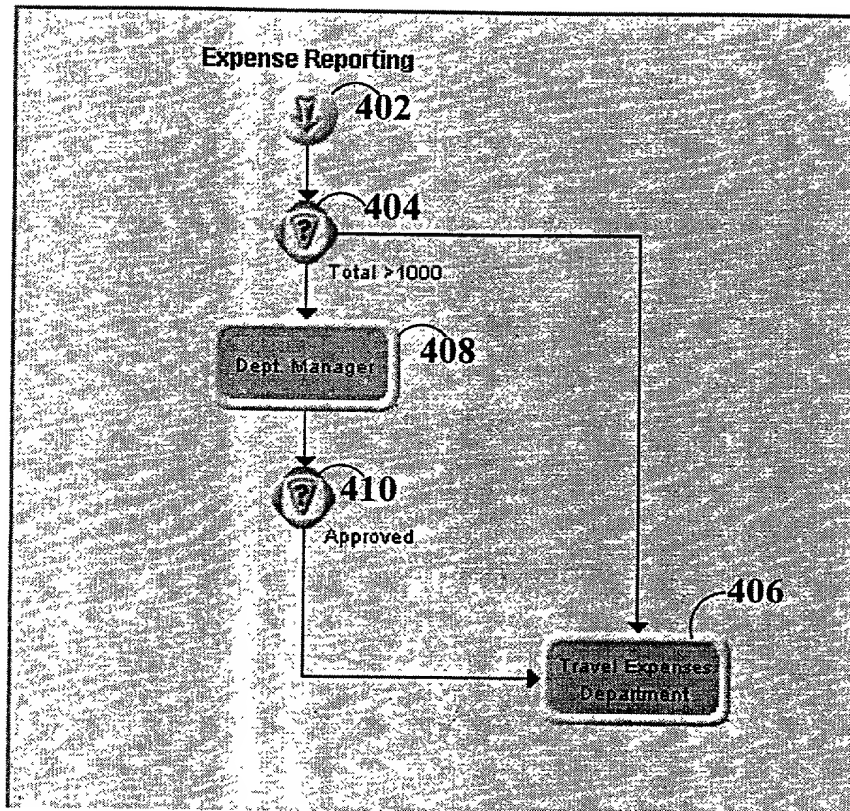


Figure 4

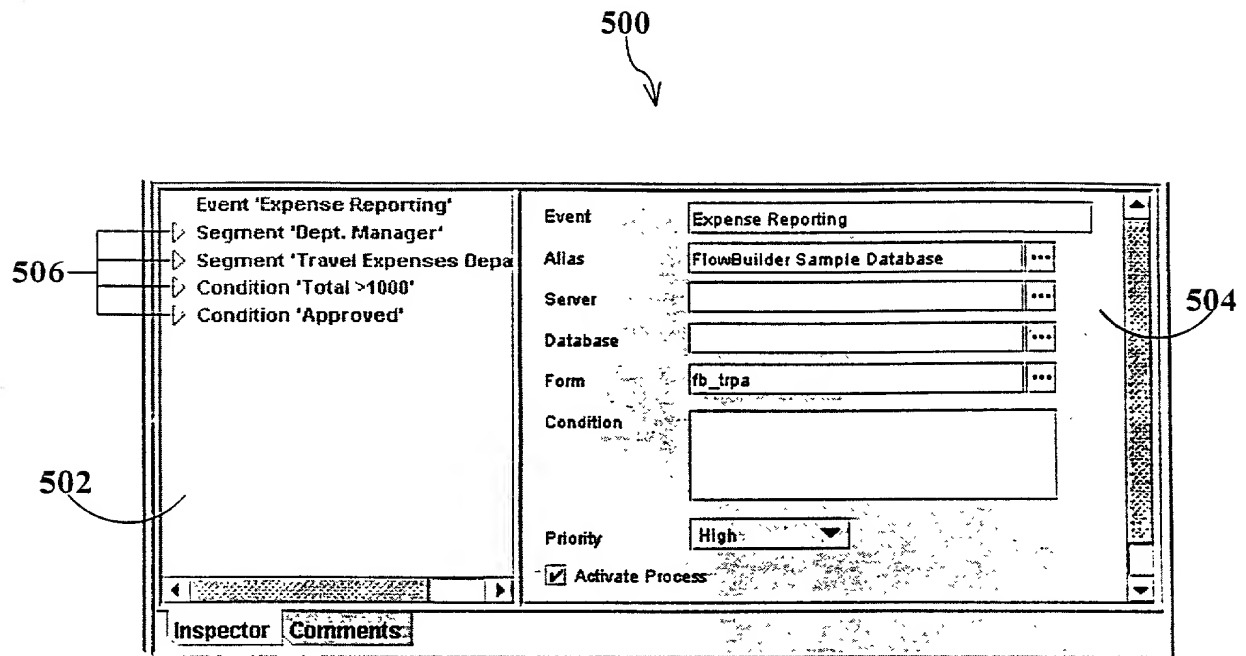


Figure 5

Event 'Absence Request'	
▽ Segment 'Line Manager Approval'	
Routing type	Approval
Routing rules	Sign off is required by
Routing options	Everybody
Time line	Anybody — 602
	Everybody — 604
	Majority — 606

Figure 6a

Event 'Cycle' ▼ Segment 'Segment1' Routing type Routing rules Routing options Deadline date Deadline handler	Routing Type Sign off is required by <div><div></div><div>Approval Combined Approval/Edit For information Review Simple Review</div></div>
Inspector	Comments

Figure 6b

Event 'Expense Reporting'

- ▼ Segment 'Dept. Manager'
 - Routing type
 - Routing rules
 - Routing options
 - Deadline date
 - Deadline handler
- ▶ Segment 'Travel Expenses Department'
- ▼ Condition 'Total >1000'
 - Previous result
 - Formula
 - On requester
- ▶ Condition 'Approved'

Routing Rules

Always send to: Department Manager

Branching Label

Formula

Simple Roles: Department Manager

Composed Roles

Static Users

Add Change Delete Clear

Inspector Comments

702

704

Figure 7a

Event 'Expense Reporting'

Segment 'Dept. Manager'

- Routing type
- Routing rules
- Routing options
- Deadline date
- Deadline handler

Segment 'Travel Expenses Department'

Condition 'Total >1000'

Condition 'Approved'

Routing Rules

Always send to: Department Manager

Branching Label

Formula

Simple Roles Department Manager ...

Composed Roles

Static Users ...

New **Duplicate** **Delete**

Inspector

Comments

706

708

710

Figure 7b

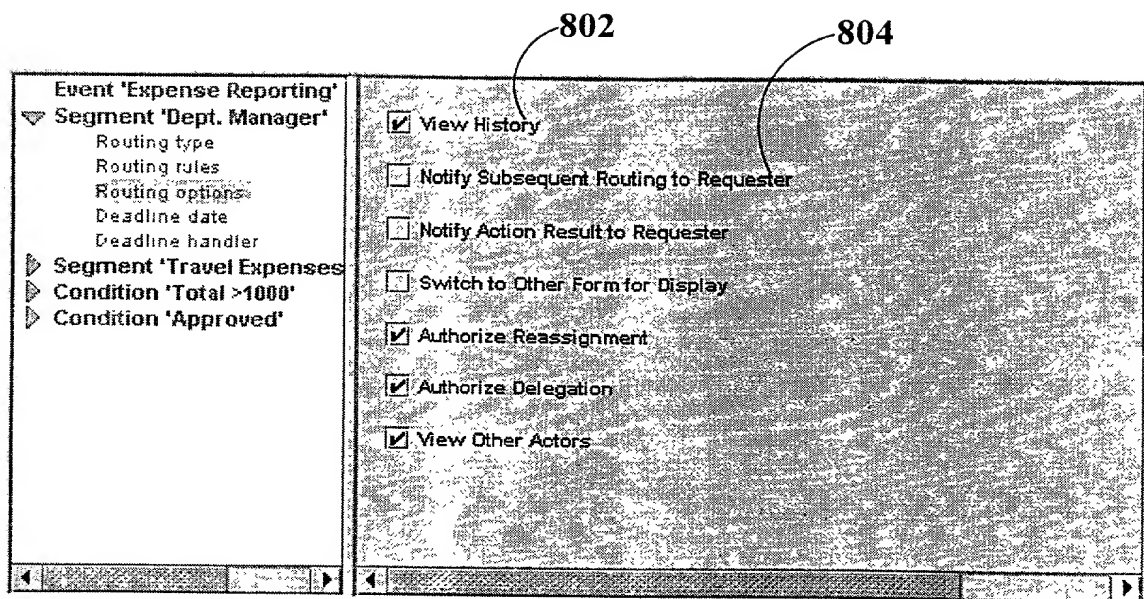


Figure 8

902

Event 'Cycle' ▼ External External1 External handler	Segment ID	External1
	Label	
	Comment	
	Link to URL	<input type="text"/> <input type="button" value="Preview"/>

Inspector Comments

Figure 9

1002

<p>Event 'Cycle'</p> <p>External 'External1'</p> <p>External handler</p>	<p>Yield for external processing task <input type="button" value="No"/></p> <p>Alias <input type="text"/></p> <p>Server <input type="text"/></p> <p>Database <input type="text"/></p> <p>Agent <input type="text"/></p>
<p>Inspector</p>	<p>Comments</p>

Figure 10

Event 'Expense Reporting'

Segment 'Dept. Manager'

- Routing type
- Routing rules
- Routing options
- Deadline date
- Deadline handler

Segment 'Travel Expenses'

Condition 'Total >1000'

Condition 'Approved'

☒ Set Deadline 1108

Deadline Type: Handling Margin 1102

Time Unit: Days 1104

Handling Margin: 0 1106

User Defined Deadline Date

Inspector Comments

Figure 11

Event 'Expense Reporting'

Segment 'Dept. Manager'

Routing type

Routing rules

Routing options

Deadline date

Deadline handler

Segment 'Travel Expense'

Condition 'Total >1000'

Condition 'Approved'

How should FlowBuilder handle this deadline

Send Reminder

Time unit: Days

Start sending reminders: 2 before deadline

Stop sending reminders: 0 after deadline

Repeat interval: 1

Repeat number: 1

Who should FlowBuilder notify if deadline is exceeded

☐ Notify Requester — 1204

☐ Notify People — 1206

What should FlowBuilder do if reminder is ignored

Abort Cycle

Who should FlowBuilder notify if reminder is ignored

☐ Notify Requester

☐ Notify People

Inspector Comments

Figure 12

Event 'Expense Reporting'

- ▶ Segment 'Dept. Manager'
- ▶ Segment 'Travel Expenses Depa
- ▶ Condition 'Total >1000'
- ▼ Condition 'Approved'

Previous result:
Formula
On requester

Previous result condition: All Succeed

☒ Specified Segments Must Succeed

☒ Specified Segments Can Fail

Inspector: Comments

Figure 13

Event 'Expense Reporting'

- ▶ Segment 'Dept. Manager'
- ▶ Segment 'Travel Expenses Depa
- ▶ Condition 'Total >1000'
- ▼ Condition 'Approved'
 - Previous result
 - Formula
 - On requester

Document Formula

Inspector Comments

Figure 14

1502

☒ Set Requester Filter

Requester is assigned the following roles — **1504** Include subtree

☒

Requester is not assigned the following roles — **1506**

☒

Requester belongs to the following organizations — **1508**

☒

Requester does not belong to the following organizations — **1510**

☒

Figure 15

Composed Role	Evaluation Result	Remarks
{"Philip Collins/TRILOG"}	Philip Collins/TRILOG	This is equivalent to choosing a static user from your Name and Address Book.
Line Manager ({ "Philip Collins/TRILOG": "Mary Davis/TRILOG" })	Line Manager of Philip Collins/TRILOG Line Manager of Mary Davis/TRILOG	The Notes formula is evaluated to a user list then the simple role is applied to each user independently.
{@UserName}	The workflow requester	Do not use @UserName in a formula, as the user who launched the FlowBuilder Router is returned.
Secretary({@Subset(\$UpdatedBy;-1)})	The secretary of the user who last updated the document	Only valid if the Form is not marked anonymous.
Line Manager ({FB_Requester})	The Line Manager of the Requester	This syntax is equivalent to Line Manager.
[Project]	The Project field in the document is interpreted as a role. Usually, users will use a dropdown list with the existing projects and have them available as roles in the Planner. If the user selects Project A for instance, MORSE will evaluate the role Project A to determine the recipients.	Square brackets can be used in the same way braces are used. MORSE would simply interpret the result of the formula as roles that yet need to be evaluated to recipients.
Secretary (Accounts Payable({FB_ActionUser}))	The secretary of Accounts Payable of all users who were acting on the document in the previous workflow segment.	Roles at any level may be composed.

Figure 16


1702

Event 'Cycle' ▶ External 'External1' Subflow 'Subflow1'	Subflow ID	<input type="text" value="Subflow1"/>
	Label	<input type="text"/>
	Target Cycle	<input type="text" value="1704"/>
	Comment	<input type="text"/>
	Link to URL	<input type="text"/> <input type="button" value="Preview"/>

Inspector **Comments**


Figure 17

1802

Routing Type 

Routing Type	Combined Approval/Edit
Notification Message	Default Approval Notification
Routing Category	Activity required
Activity Label	
Activity Description	You are required to Approve or Deny this request. You are allowed to update the following information if needed.
Document Access	Editor
Activity Status Labels	
Pending Status	Pending
Success Status	Approved
Failure Status(optional)	Denied
Activity Result Notification	
Success Message	Successful Approval Message
Failure Message	Denial Message

Figure 18a

Routing Type 

Routing Type Simple Review


Notification Message Default Review Notification ▼

Routing Category Purely informational ▼

1804

Figure 18b

1806

Routing Type 

Routing Type:

Notification Message:

Routing Category:

Activity Label:

Activity Description:

Document Access:

Activity Status Labels:

Pending Status:

Success Status:

Failure Status (optional):


Activity Result Notification:

Success Message:

Failure Message:

Figure 18c

1808

Routing Type 

Routing Type	For information
Notification Message	Generic Information Message ▼
Routing Category	Purely Informational ▼

Figure 18d

1810

Routing Type

Routing Type	<input type="text" value="Review"/>
Notification Message	<input type="text" value="Default Review Notification"/>
Routing Category	<input type="text" value="Activity required"/>
Activity Label	<input type="text"/>
Activity Description	<input type="text" value="Please acknowledge that you reviewed this document"/>
Document Access	<input type="text" value="Editor"/>
Activity Status Labels	
Pending Status	<input type="text" value="Pending"/>
Success Status	<input type="text" value="Reviewed OK"/>
Failure Status (optional)	<input type="text" value="Back for changes"/>
Activity Result Notification	
Success Message	<input type="text" value="Successful Review Message"/>
Failure Message	<input type="text" value="Denial Review Message"/>

Figure 18e

Figure 19a

Notification Message

Message Id

Default Approval Notification

Message description

This is the default message associated with all approval actions unless overridden in a workflow segment route description

Subject

{FB_Event} from {@Name([CN];FB_Requester)}: Approval Required

Body

Please approve the following document requested by {@Name([Abbreviate];FB_Requester)}:

Options

☒ Append URL

☒ Keep URL Parameters

☒ Append DocLink

Building context sensitive messages:


In both Subject and Body, you can include the text of any Notes formula acting on the routed document between braces. The FlowBuilder Router will evaluate all formulas at run time. The following example uses FlowBuilder technical fields from the Workflow Subform.

Example:

{FB_Event}:Approval Required
Request submitted by {@Name([CN];FB_Requester)} on {@Date(FB_RequestTime)}

Figure 19b

Notification Message



Message Id

Default Review Notification

Message description

This is the default message associated with all review actions unless overridden in a workflow segment route description

Subject

[FB_Event]: Review requested by
{@Name([CN]:FB_Requester)}

Body

Please review the following document requested by
{@Name([Abbreviate]:FB_Requester)}:

Options

☒ Append URL

☒ Keep URL Parameters

☒ Append Doolink

Building context sensitive messages:

In both Subject and Body, you can include the text of any Notes Formula acting on the routed document between braces. The FlowBuilder Router will evaluate all formulas at run time. The following example uses FlowBuilder technical fields from the Workflow Subform.

Example:

[FB_Event]: Approval Required
Request submitted by {@Name([CN]:FB_Requester)} on {@Date(FB_RequestTime)}

Figure 19c

Notification Message

Message Id	Denial Message
Message description	Denial Message
Subject	{FB_Event}: Your request has been denied.
Body	The request you have submitted has been denied:
Options	<input checked="" type="checkbox"/> Append URL <input checked="" type="checkbox"/> Keep URL Parameters <input checked="" type="checkbox"/> Append DocLink

Building context sensitive messages:

In both Subject and Body, you can include the text of any Notes Formula adding on the routed document between braces. The FlowBuilder Router will evaluate all formulas at run time. The following example uses FlowBuilder technical fields from the Workflow Subform:

Example:
 {FB_Event}: Approval Required
 Request submitted by: {@Name(CN):FB_Requester} on: {@Date(FB_RequestTime)}

Figure 19d

Notification Message


Message Id	Denial Review Message
Message description	Denial Review Message
Subject	{FB_Event}; Reviewer denied.
Body	Reviewer had several remarks on the document submitted on {@Text(FB_RequestTime)}. See comments:
Options	<input checked="" type="checkbox"/> Append URL <input checked="" type="checkbox"/> Keep URL Parameters <input checked="" type="checkbox"/> Append DocLink

Building context sensitive messages:

In both Subject and Body, you can include the text of any Notes Formula acting on the routed document between braces. The FlowBuilder Router will evaluate all formulas at run time. The following example uses FlowBuilder technical fields from the Workflow Subform.

Example:
 {FB_Event}; Approval Required
 Request submitted by {@Name(CN):FB_Requester} on {@Date(FB_RequestTime)}

Figure 19e



Notification Message

Message Id

Generic Information Message

Message description

Generic Notification (purely informational)

Subject

Notification about {FB_Event}; Document submitted by {@Name([CN];FB_Requester)}.

Body

Document submitted by {@Name([CN];FB_Requester)} on {@Text(FB_RequestTime)}.

Options

☒ Append URL
☒ Keep URL Parameters
☒ Append DocLink

Building context-sensitive messages:

In both Subject and Body, you can include the text of any Notes Formula acting on the routed document between braces. The FlowBuilder Router will evaluate all formulas at run time. The following example uses FlowBuilder technical fields from the Workflow Subform.

Example:

{FB_Event}; Approval Required
 Request submitted by {@Name([CN];FB_Requester)} on {@Date(FB_RequestTime)}

Figure 19f

Notification Message

Message Id	Simple Review Completion
Message description	Simple Review Completion Message
Subject	{FB_Event}; Reviewer has reviewed the document.
Body	The document you submitted on {@Text(FB_RequestTime)} has been reviewed. See comments.
Options	<input checked="" type="checkbox"/> Append URL <input checked="" type="checkbox"/> Keep URL Parameters <input checked="" type="checkbox"/> Append DocLink

Building context sensitive messages:

In both Subject and Body, you can include the text of any Notes Formula acting on the routed document between braces. The FlowBuilder Router will evaluate all formulas at run time. The following example uses FlowBuilder technical fields from the Workflow Subform.

Example:
 {FB_Event}; Approval Required
 Request submitted by {@Name(CN;FB_Reqester)} on {@Date(FB_RequestTime)}

Figure 19g

Notification Message

Message Id

Stanes Special

Message description

Subject

This the special message for you

Body

You do not need to worry about this but it will cost you a lot of money

Options

☒ Append URL

☒ Keep URL Parameters

☒ Append DocLink

Building context sensitive messages:

In both Subject and Body, you can include the text of any Notes Formula acting on the routed document between braces. The FlowBuilder Router will evaluate all formulas at run time. The following example uses FlowBuilder technical fields from the Workflow Subform.

Example:

{FB_Event}; Approval Required

Request submitted by {@Name(CN);FB_Requester} on {@Date(FB_RequestTime)}

Figure 19h

Notification Message

Message Id	Successful Approval Message
Message description	Successful Approval Message
Subject	{FB_Event}: Your request has been approved.
Body	The request you submitted on {@Text(FB_RequestTime)} has been approved.
Options	<input checked="" type="checkbox"/> Append URL <input checked="" type="checkbox"/> Keep URL Parameters <input checked="" type="checkbox"/> Append DoLink

Building context sensitive messages

In both Subject and Body, you can include the text of any Notes Formula acting on the routed document between braces. The FlowBuilder Router will evaluate all formulas at run time. The following example uses FlowBuilder technical fields from the Workflow Subform.

Example

{FB_Event}: Approval Required
 Request submitted by {@Name(CN:FB_Requester)} on {@Date(FB_RequestTime)}

Figure 19i

Notification Message

Message Id	Successful Review Message
Message description	Successful Review Message
Subject	{FB_Event}: Review completed successfully.
Body	The document you submitted on {@Text(FB_RequestTime)} has been reviewed and approved.
Options	<input checked="" type="checkbox"/> Append URL <input type="checkbox"/> Keep URL Parameters <input type="checkbox"/> Append DocLink

Building context sensitive messages

In both Subject and Body, you can include the text of any Notes Formula acting on the routed document between braces. The FlowBuilder Router will evaluate all formulas at run time. The following example uses FlowBuilder technical fields from the Workflow Subform.

Example:

{FB_Event}: Approval Required
Request submitted by {@Name(CN);FB_Request} on {@Date(FB_RequestTime)}

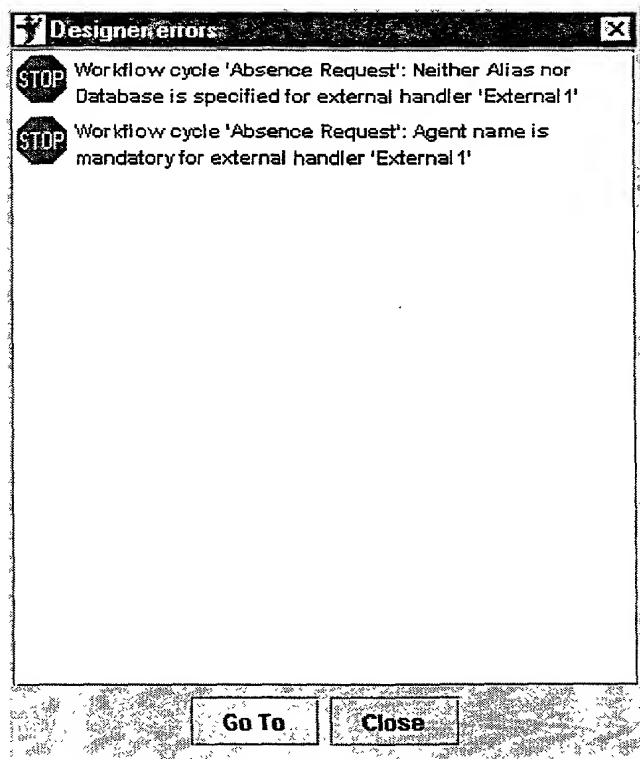


Figure 20

FlowBuilder: Statistics		Requester	Event	Created	Last processed	Current Status
Workflow Requests All By Date and Event All By Requester Pending By Date and Event Processed By Date Performance Indicators Average Processing Time Daily Load Per User Global Load Per User		1	▼ Mary Davis/TRILOG			
			Expense Reporting	09/09/2000 04:39:43 PM		⚙ Pending Approval
		4	▼ Philip Collins/TRILOG			
			Absence Request	09/09/2000 04:48:04 PM		⚙ Pending Approval
			Salary Review	09/09/2000 04:26:45 PM	09/09/2000 04:29:15 PM	✖ Back for changes
			Absence Request	09/09/2000 04:24:29 PM	09/09/2000 04:28:39 PM	✓ Approved
			Absence Request	09/09/2000 08:39:48 AM	09/09/2000 04:42:43 PM	✓ Approved
		1	▼ Sam Moneyperny/TRILOG			
			Expense Reporting	09/09/2000 04:44:20 PM		⚙ Pending Approval
		1	▼ Ulrich Finger/TRILOG			
			Absence Request	09/09/2000 04:49:40 PM		⚙ Pending Approval

Figure 21

Event Log



Workflow History

Actual Document

9/9/00 4:48:18 PM New Event 'Absence Request' detected: Workflow Cycle initiated on form 'Absence Request'.

9/9/00 4:48:18 PM Requester = Philip Collins/TRILOG

9/9/00 4:48:18 PM Absence Request: Executing Workflow Segment --> Line Manager Approval

9/9/00 4:48:18 PM Notification sent to the following recipients:

Mary Davis/TRILOG - Role : Line Manager

9/9/00 4:48:18 PM Number of people required for success = 1

9/9/00 4:48:18 PM User(s): Mary Davis/TRILOG

Notified about : Absence Request from Philip Collins: Approval Required

Figure 22

Reassign Task

Reassign Task

Server: Training/TRILOG
Database: flowbuilder\fosample.nsf
Process: Absence Request

Current Activity Participants **Reassign To**

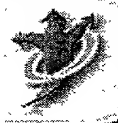
Mary Davis/TRILOG Sam Moneypenny/TRILOG

Reassign

OK

Figure 23

Event Log



Workflow History

Actual Document



9/9/00 4:48:18 PM New Event 'Absence Request' detected: Workflow Cycle initiated on form 'Absence Request'.

9/9/00 4:48:18 PM Requester = Philip Collins/TRILOG

9/9/00 4:48:18 PM Absence Request: Executing Workflow Segment --> Line Manager Approval

9/9/00 4:48:18 PM Notification sent to the following recipients:

Mary Davis/TRILOG - Role : Line Manager

9/9/00 4:48:18 PM Number of people required for success = 1

9/9/00 4:48:18 PM User(s): Mary Davis/TRILOG



Notified about : Absence Request from Philip Collins: Approval Required


9/9/00 9:18:49 PM Action Approval reassigned by Mary Davis/TRILOG to Sam Moneypenny/TRILOG

9/9/00 9:18:49 PM User(s): Sam Moneypenny/TRILOG

Notified about : Absence Request from Philip Collins: Approval Required

Figure 24


Address  http://localhost/fbmanager.html  [Links](#)

**FlowBuilder
Servlet Manager**

Enter Password

Change Password

Confirm

flowbuilder/fbadmin.nsf 

[Stop Service](#)

[Set High Priority](#)

[Set Normal Priority](#)

[Set Low Priority](#)

[Set Deadline Frequency](#)

FlowBuilder Router Information


Service Database	High Priority	Normal Priority	Low Priority	Deadline Manager
 flowbuilder/fbadmin.nsf	15	60	300	600

Figure 25